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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,355	12/19/2001	Toyoaki Kitano	1163-0380P	7839
2292	7590	04/22/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			RICHER, AARON M	
			ART UNIT	PAPER NUMBER
			2676	10

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/018,355

Applicant(s)

KITANO ET AL.

Examiner

Aaron M Richer

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 13, 14, and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/19/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed February 5, 2004 have been fully considered but they are not persuasive.

As to rejected claims 1-4 and 6-8, the applicant argues that Mok does not teach a "mounted" displaying means. The displaying means disclosed by Mok is mounted on a laptop computer housing. It is not permanently fixed or mounted in a specific position, but this feature of the applicant's invention is not recited in any claims. The applicant further argues that the housing for the keyboard disclosed by Mok remains fixed while the display rotates. Mok clearly shows in figures 1 and 2 that the keyboard comes out of the main display portion of the computer by rotating on a hinge. Therefore, Mok does disclose a rotatable operating means as recited in claim 1.

As to rejected claim 5, new grounds of rejection have been applied because of the amendment of claim 5.

Claim Rejections - 35 USC § 102

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-3, 7-8, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Mok.

4. As to claims 1 and 15, claim 1 recites "A display apparatus comprising: a mounted displaying means for displaying visual information". Mok discloses "a display... placed in the upper housing portion... of the computer housing" (col. 2, lines

50-52). Figures 1-5 of Mok show a display panel (element 24) mounted on a computer housing. Claim 1 further recites "an operating means for outputting a predetermined signal to control an operation of a device". Mok further discloses operating means, in the form of a keyboard: "A keyboard is placed on top of the lower portion of the computer housing" (col. 2, lines 53-54). Finally, Claim 1 recites "a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means". Mok discloses supporting means for supporting the operating means, in the form of a mechanical link, provided near a peripheral portion of the display (see fig. 3; col. 2, lines 53-67; col. 3, lines 1-11). This disclosure also shows that the operating means is pivotable, or rotatable, on the supporting means with respect to the displaying means.

5. As to claims 2 and 16, Claim 2 recites "The display apparatus as claimed in claim 1, wherein said operating means is set, at a time of non-operation, to a first position in which an operating surface faces a display surface of said displaying means". Mok discloses that "When the upper portion or display panel...is swung closed or downwardly, an opposite movement of the mechanism takes place, and the keyboard...moves back into the rest position" (col. 3, lines 58-62). It is clearly shown by Figure 6 of Mok that the display means and the operating means (keyboard) are facing each other in this "rest position". The "rest position" disclosed by Mok is equivalent to the "time of non-operation" recited by Claim 2.

Claim 2 further recites that the operating means is "set, at a time of operation, to a second position in which, rotating said first position, use of said operating surface to initiate the operation is permitted". Mok discloses that "When the laptop computer 50 is swung open, as shown in FIGS. 4 and 5, the lower bar 56 is pulled towards the rear of the computer 50. This movement of the lower bar 56 rotates the gears 62 counter-clockwise and forces the upper bar 56 to move towards the front of the computer. As a result, the keyboard 26 is slid outwardly towards the front and concurrently tilted upwardly" (col. 3, lines 51-58). This outward and upward keyboard movement, after the pivoting or rotation of position, is done so that the user can use the keyboard for operation, as in Claim 2.

6. As to claims 3 and 17, Claim 3 recites "The display apparatus as claimed in claim 2, wherein said supporting means comprises an arm portion, said arm portion being housed when said operating means is set to said first position". Mok discloses that "said lower bar having an extension arm journaled to said display panel [that] displaces said lower bar to tilt said keyboard angularly upwardly while concurrently causing said lower bar to rotate said gears and sliding the upper bar and the therewith attached keyboard forwardly and outwardly relative to the housing" (col. 4, lines 40-54). Clearly this describes an arm portion that projects the operating means (keyboard) forward from the displaying means when used.

Claim 3 further recites "[the arm portion] being projected forward when said operating means is set to said second position so as to separate said displaying means from said operating means". Mok discloses that "closing of said display panel causes

said lower bar to move forwardly so as to lower the keyboard into the housing" (col. 4, lines 55-61). This describes an arm portion moving back into the housing with the operating means (keyboard) when the operating means are not used.

7. Claim 7 recites "The display apparatus as claimed in claim 2, wherein the second position is a position in which the operating surface of said operating means forms an obtuse angle relative to the display surface of said displaying means." Figures 2 and 5 of Mok clearly show the display surface (element 22) at an obtuse angle with the operating means (keyboard, element 26).

8. Claim 8 recites "The display apparatus as claimed in claim 1, further comprising an angle adjusting means for adjusting an angle to be formed between the operating surface of said operating means and the display surface of said displaying means." Mok discloses that the display panel is "pivotal between a folded down closed position and upwardly raised open positions" (col. 5, lines 31-33). The display panel is pivotable with respect to the operating panel and therefore an angle adjustment takes place every time the display panel is pivoted.

Claim Rejections - 35 USC § 103

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 4, 6, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Batio (U.S. Patent 5,949,643).

11. As to claims 4 and 18, Claim 4 recites "The display apparatus as claimed in claim 2, wherein, when said operating means is set to said first position, said displaying

means makes a display only on a display surface which is free from overlapping with said operating means.” Mok teaches a display apparatus as claimed in claim 2. Mok does not teach displaying means that makes a display only on a display surface which is free from overlapping. Batio, however, discloses “a dual LCD display or split screen 101, with each section being pivotally attached to a keyboard half-section. Each half of the split-screen is independently, pivotally mounted so that each may be moved separately” (col. 8, lines 14-24). Batio further discloses that the screens can be used simultaneously for different purposes: “one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor” (col. 8, lines 50-56). Batio discloses many advantages of a split display, such as for two-player game play (col. 3, lines 61-67; col. 4, lines 1-4) and for use as a translation device (col. 9, lines 15-23). Batio also discloses that the split screen allows the device to be “compactly stored” (col. 2, lines 5-11). Being pivotally mounted, these screens can be folded down onto the operating means (keyboard half-section). It is also shown that the two screens can be used independently of each other. If one screen is in use (free from overlapping means), and the other is folded-down and not in use (not free from overlapping means), only the display surface that is free from overlapping means will be used, as in Claim 4. It would have been obvious to one skilled in the art to modify Mok to include a split display, in which only the part of the display free from overlapping means would be used, in order to make the device more useful as taught by Batio.

12. Claim 6 recites "The display apparatus as claimed in claim 2, wherein said displaying means displays the visual information in a plurality of screens, and wherein, in case it is to make a divided display when said operating means is set to said first position, the divided display is made only on the display surface free from overlapping with said operating means, and wherein, in case it is to make a divided display when said operating means is set to said second position, the divided display is made on all of the display surface." Mok teaches a display apparatus as claimed in claim 2. Mok does not teach a divided display when operating means are set to first position or second position. Batio, however, discloses a divided display on the entire display surface: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). This describes a divided display on all of the display surface. Also, since Batio states that the screens can be used independently of one another (see rejection of Claim 4), and functions such as word processing and video games use divided displays to show information, toolbars, etc., it is implied that Batio's invention would display a divided display on only one screen if the other screen was not free from overlapping means. In this way, Batio is describing a divided display made only on the display surface free from overlapping with operating means. It would have been obvious to modify Mok to include a divided display available on part or all of a screen, in order to allow users to perform multiple tasks at one time as taught by Batio.

13. Claims 5 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Batio and further in view of Suga (U.S. Patent 4,800,376).

14. As to claims 5, and 19, Mok discloses a display apparatus comprising:
displaying means for displaying visual information (col. 2, lines 50-52);
an operating means for outputting a predetermined signal to control an operation of a device (col. 2, lines 53-54);
a supporting means for supporting said displaying means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means (see fig. 3; col. 2, lines 53-67; col. 3, lines 1-11);

wherein said operating means is operable to be set in one of the following positions:

a first position in which an operating surface faces a display surface of said displaying means (see fig. 6; col. 3, lines 58-62),

a second position in which, rotating from said first position, use of said operating surface to initiate the operation is permitted (see fig. 2, col. 3, lines 51-58),

Mok does not disclose an invention wherein, when said operating means is set to said first position, said displaying means displays the visual information only on a display surface which is free from overlapping with said operating means. Batio, however, discloses split screens that can be used simultaneously for different purposes: "one half of the split-screen 101 may be used for normal computer functions, such as word processing, by means of the first microprocessor, whereas the second half of the

split screen 101 may be used for playing video games via the dedicated game-microprocessor" (col. 8, lines 50-56). Batio discloses many advantages of a split display, such as for two-player game play (col. 3, lines 61-67; col. 4, lines 1-4) and for use as a translation device (col. 9, lines 15-23). Batio also discloses that the split screen allows the device to be "compactly stored" (col. 2, lines 5-11). . It would have been obvious to one skilled in the art to modify Mok to include a split display, in which only the part of the display free from overlapping means would be used, in order to make the device more useful as taught by Batio.

Neither Mok nor Batio discloses an invention wherein said displaying means changes a displaying scale depending on a size of the display surface available for displaying. Suga, however, discloses a tiled display system in which an encoder enlarges a display corresponding to the size of the total display, in this case the number of decoders for displays (col. 2, lines 47-57). The motivation for this is that more screens comprise a larger display that can be seen by more people (col. 1, lines 30-35). It would have been obvious to one skilled in the art to modify Mok and Batio to change a display scale depending on the size of a display surface in order to make a display larger to attract the attention of more people as taught by Suga.

15. Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mok in view of Ames (U.S. Patent 4,787,040).

As to claim 9, Mok discloses the display apparatus as claimed in claim 1. Mok does not disclose said display apparatus being installed in an automobile. Ames, however, discloses a display apparatus installed in an automobile (fig. 2). The

motivation for this is to provide a single interface for many computerized automobile functions, such as an electronic compass display and appointment calendar (col. 2, lines 20-43). It would have been obvious to one skilled in the art to modify Mok to install a display apparatus in an automobile in order to provide a single interface for many functions as taught by Ames.

16. As to claim 10, Mok discloses the display apparatus as claimed in claim 1. Mok does not disclose an invention wherein said operating means permits a user to operate one or more devices, the predetermined signal being output to the device being operated by the user. Ames, however, discloses an operating means that operates many devices, such as climate control and a CD player (fig. 3). The motivation for this is to provide a single interface for many computerized automobile functions, such as an electronic compass display and appointment calendar (col. 2, lines 20-43). It would have been obvious to one skilled in the art to modify Mok to operate one or more devices in order to provide a single interface for many functions as taught by Ames.

17. As to claim 11, Mok in view of Ames discloses the display apparatus as claimed in claim 10. Ames further discloses an invention wherein the displaying means is used to display visual information relating to the user's operation of the device via the operating means (fig. 3; col. 5, lines 33-62).

18. As to claim 12, Mok in view of Ames discloses the display apparatus as claimed in claim 11. Ames further discloses an invention wherein the one or more devices include at least one of an audio device, an image reproducing device, and a navigation device (fig. 3; col. 5, lines 33-62).

Conclusion

19. Claims 13, 14, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

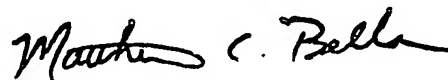
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M Richer whose telephone number is (703) 305-5825. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (703) 308-6829. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMR
4/12/04



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